Patents Office
Government Buildings
Hebron Road
Kilkenny

I HEREBY CERTIFY that annexed hereto is a true copy of documents filed in connection with the following patent application:

Application No.	S980596
Date of Filing	21 July 1998
Applicant	ALLTRACEL PHARMACEUTICALS PLC, an Irish company of 87 Quinns Road, Shankill, County Dublin, Ireland.

Dated this 7 day of December, 2000.

An officer authorised by the
Controller of Patents, Designs and Trademarks.

FORM NO. 1

REQUEST FOR THE GRANT OF A PATENT

PATENTS ACT, 1992

The Applicant(s) named herein hereby request(s)

_____ the grant of a patent under Part II of the Act

__X__ the grant of a short-term patent under Part III of the Act on the basis of the information furnished hereunder.

1. Applicant(s)

Name Alltracel Pharmaceuticals PLC

Address 87 Quinns Road
Shankill
County Dublin
Ireland

Description/Nationality

An Irish company

2. Title of Invention

"A process"

3. Declaration of Priority on basis of previously filed application(s) for same invention (Sections 25 & 26)

Previous filing date	Country in or for which filed	Filing No.

4. Identification of Inventor(s)
Name(s) of person(s) believed
by Applicants(s) to be the inventor(s)

Name: Ivan Santar, a citizen of the Czech Republic
Address: Travniky 1006, CZ-6602 Predklasteri, Czech Republic.

Name: Frantisek Kiss, a citizen of the Czech Republic
Address: Bednarova 20a, CZ-61900 Brno, Czech Republic.

Name: Jiri Briestensky, a citizen of the Czech Republic
Address: Skolska 413, CZ-50343 Cernilov, Czech Republic.

5. Statement of right to be granted a patent (Section 17(3) (b)

The Applicant derives the rights to the invention by virtue of Agreements dated December 23, 1996 and December 30, 1996.

6. Items accompanying this Request – tick as appropriate

(i) __X__ prescribed filing fee (£50.00)

(ii) ____ specification containing a description and claims

__X__ specification containing a description only

____ Drawings referred to in description or claims

(iii) ____ An abstract

(iv) ____ Copy of previous application (s) whose priority is claimed

(v) ____ Translation of previous application whose priority is claimed

(vi) __X__ Authorisation of Agent (this may be given at 8 below if this Request is signed by the Applicant (s)

7. Divisional Application (s)

The following information is applicable to the present application which is made under Section 24 –

Earlier Application No: .....

Filing Date: .....

8. Agent

The following is authorised to act as agent in all proceedings connected with the obtaining of a patent to which this request relates and in relation to any patent granted -

Name	Address
John A. O'Brien & Associates	The address recorded for the time being in the Register of Patent Agents, and currently Third Floor, Duncairn House, 14 Carysfort Avenue, Blackrock, Co. Dublin, Ireland.

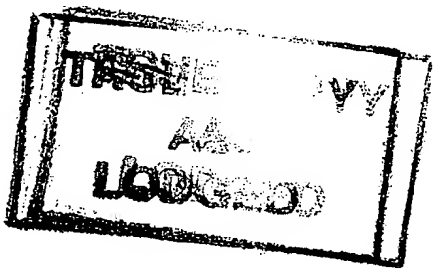
9. Address for Service (if different from that at 8)

As above

Signed _____ JOHN A. O'BRIEN & ASSOCIATES

Date July 21, 1998

S980596
APPLICATION No.



"A Process"

Introduction

The invention relates to polyanhydroglucuronic acids and salts thereof. The term polyanhydroglucuronic acid and salts thereof as used herein includes copolymers thereof, especially with anhydroglucose.

Co-pending patent application PCT IE98/00003 describes a haemostatically active aerosol composition of polyanhydroglucuronic acid and/or acceptable salts thereof.

Co-pending patent application PCT IE98/00004 describes particular polyanhydroglucuronic acids and salts thereof and a method of preparing such compounds.

In particular therefore, the term polyanhydroglucuronic acids and salts thereof includes the acids and salts referred to in our co-pending applications mentioned above.

This invention especially relates to the processing of powder/particle forms of polyanhydroglucuronic acid and salts thereof.

Statements of Invention

According to the invention there is provided a process for treating powder/particle forms of polyanhydroglucuronic acid and salts thereof by granulation to form granules of the material.

In one embodiment of the invention a layer of polyanhydroglucuronic acid and salts thereof in particulate form is fluidised and a granulating medium is applied to form agglomerated particles of a desired size.

The polyanhydroglucuronic acid and salts thereof may be initially in the form of particles having a size range of from 0.1 to 10μm.

Most preferably, the polyanhydroglucuronic acids and salts thereof are those described in co-pending PCT IE98/00004.

The granulating medium may be a liquid such as water or a mixture of water with one or more water-miscible liquids. Alternatively the granulating medium may be in the form of a vapour which may be sprayed onto the bed of particles.

The invention also provides granules of polyanhydroglucuronic acid and salts thereof.

The invention further provides compositions/formulations incorporating such granules.

Detailed Description

Polyanhydroglucuronic acid and salts thereof in a powder/particle form, particularly as described in our co-pending Application PCT IE98/00004 are granulated to form agglomerated particles of a desired size. A layer of the powder/particle material, preferably in a size range of 0.1 to 10μm is air fluidised in a suitable apparatus such as a mixer. A granulating medium is then added. The granulating medium may be water or a mixture of water with one or more water-miscible liquids. Alternatively the granulating medium may be in the form of a vapour, such as water vapour which may be sprayed onto the fluidised bed of

particles. The granulating medium may be added in single dose or continuously in multiple doses, depending on the type of the fluidised granulation unit used.

The granules thus formed may be fractionated and, if desired, dried to produce granules of a desired size.

The granules retain the haemostatic effect of the material and may be particularly used in applications such as in a multi-layer haemostatic and/or absorbent pads and dressings. Alternatively such granules may be used for embolisation of larger arteries, for example in kidney treatments. The granules may also be used as at least part of filter medium or filler, for example as fillers for chromatographic colums, especially those used for peptide separation.

The invention is not limited to the embodiments hereinbefore described which may be varied in detail.